





AMENDMENTS TO THE CLAIMS

1. (Currently amended) An optical information recording medium comprising:

- a transparent substrate:
- a recording layer disposed on the transparent substrate; and
- a reflective layer disposed on the recording layer,

the optical information recording medium being capable of performing, at a linear recording velocity of 28.8 m/s to 33.6 m/s, at least one of recording, erasing and rewriting information by irradiating and scanning with focused light to thereby form and erase recording marks on the recording layer,

wherein the recording layer comprises at least one of alloys and intermetallic compounds each mainly comprising Ga, Ge, Sb, and Te in a compositional ratio represented by the following formula:

$$Ga_xGe_y(Sb_zTe_{1-z})$$
 1-x-y

wherein x, y and z each represent an atomic ratio of a positive real number less than 1 and satisfy the following conditions:

 $0.02 \le x \le 0.06$

0.01≤y≤0.06

 $0.80 \le z \le 0.86$

x≥y

x+y≤0.1.

2. (Original) An optical information recording medium according to Claim 1, wherein the atomic ratio z satisfies the following condition: 0.815≤z≤0.86.

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- 3. (Original) An optical information recording medium according to Claim 1, wherein the content of the at least one of alloys and intermetallic compounds each mainly comprising Ga, Ge, Sb, and Te in the recording layer is 90 atomic percent or more.
- 4. (Original) An optical information recording medium according to Claim 1, wherein the at least one of alloys and intermetallic compounds each mainly comprising Ga, Ge, Sb, and Te further comprises at least one selected from the group consisting of Ag, Dy, Mg, Mn, Se, and Sn in an atomic ratio from 0.01 to 0.04.
- 5. (Original) An optical information recording medium according to Claim 1, wherein the at least one of alloys and intermetallic compounds each mainly comprising Ga, Ge, Sb, and Te further comprises Mn in an atomic ratio 0.01 to 0.04.
- 6. (Original) An optical information recording medium according to Claim 1, wherein the recording layer has a thickness of 10 nm to 25 nm.
- 7. (Original) An optical information recording medium according to Claim 1, having a preformatted scanning speed of at least one of recording, erasing and rewriting procedures, and wherein the preformatted scanning speed is from 9.6 m/s to 33.6 m/s.
- 8. (Original) An optical information recording medium according to Claim 1, wherein the reflective layer comprises at least one of Ag and an alloy comprising 95% by mole or more of Ag.

- 9. (Currently amended) An optical information recording medium according to Claim 1, wherein the reflective layer has a thickness of 80 nm to 300 nm 800 nm to 3000 nm.
- 10. (Original) An optical information recording medium according to Claim 1, further comprising an oxide layer adjacent to at least on side of the recording layer, the oxide layer mainly comprising at least one oxide and having a thickness of 1 nm to 5 nm.
- 11. (Original) An optical information recording medium according to Claim 10, wherein the oxide layer mainly comprises at least one selected from the group consisting of Al2O3, SiO2, TiO2, ZrO2, Y2O3, and ZnO.
- 12. (Original) An optical information recording medium according to Claim 1, further comprising at least one protection layer having a thickness 5 nm to 50 nm.
- 13. (Original) An optical information recording medium according to Claim 1, which can undergo initialization by irradiating and scanning with a laser beam having a power consumption of 500 mW or more at a scanning speed of 1 m/s to 2.5 m/s.

Claims 14-20. Canceled